

Amendments to the Specification

An amendment of the written description is presented under the heading "Amendment to the Specification."

Amendments to the Claims

The claims are amended as shown on the following pages under the heading LIST OF CURRENT CLAIMS. The list shows the status of all claims presently in the application including any current amendments. This list of claims is intended to supersede all prior versions of the claims in the application. Any cancellation of claims is made without prejudice or disclaimer.

AMENDMENTS TO THE SPECIFICATION

Page 2, insert the following heading between paragraphs 3 and 4:

BRIEF SUMMARY OF THE INVENTION

Page 3, amend paragraph 5 to read:

Figure 5 shows a method for integrated image analysis in accordance with the invention, in which the wood surface is accurately detected for the main part of the wood surface profile Pd (detected profile Pd), while remaining parts Pe are filled in by means of on bark measurements of the log end, experienced based values of the bark thickness and those portions of the remaining parts Pe that actually can be detected.

Page 6, amend paragraph 6 to read:

Referring now to Figure 3, where a point B3, situated on top of the bark Q at the log end periphery has been measured with the system S1, can be used in the analysis by using its position and direction in an image of the log end. The direction of a point situated on an edge is herein defined as the direction toward the interior of the log that is perpendicular to the line outlined by the edge.

Page 6, amend paragraph 7 to read:

By adding an experience based value T of the bark Q thickness to the point B3 in its direction, a new point P' is obtained. This point P' constitutes a point, which is likely to lie on, or in close ~~proximate~~ proximity to, the wood surface profile P. By defining an area DP around the point P' based on information regarding the variation of the bark thickness, an area is obtained, into which the analysis preferably should be concentrated in order to find points lying on the wood surface profile P under bark Q.

Page 7, amend paragraph 6 to read:

We now refer to Figure 5. The result of the analysis is the detected profile Pd of the wood surface under bark. Those parts, which were not detected with enough accuracy by the image analysis (remaining parts Pe), can be estimated by the detected profile Pd and the measurement of the log end profile on bark. By the camera equation, the result is transformed back to the plane of the log end in order to be used in a further analysis of, for example, the shape and dimension of the wood surface.